E-rase Your E-waste

Electronic Recycling Event August 24th, 2006

Butte



Final Report

Prepared by: Sandra Boggs
Recycling and Marketing Development Specialist
Business and Community Assistance Program
Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
406-841-5217 phone

I. Background

The Butte E-rase Your E-waste electronics recycling event is part of the Department of Environmental Quality's (DEQ) Rural Electronic Waste Recycling Program. This program was initiated after a request by Senator Dan Weinberg of Whitefish to organize an electronic waste recycling collection event in the Columbia Falls and Whitefish area of Flathead Valley. DEQ responded with plans to offer a series of community electronic waste collection events as pilot projects in the Flathead, Missoula, and Helena area. Upon contact from other interested communities and organizations, the three pilot projects grew into the Montana Rural Electronic Waste Recycling Program and events in Sidney, Bozeman and Butte were added.

Events held to date include:

Whitefish CollEctronics Event, May 26 – 27, 2006; Kalispell E-rase Your E-waste Event, July 15, 2006; Missoula E-rase Your E-waste Event, July 29, 2006; Butte E-rase Your E-waste, August 24, 2006.

The pilot projects provide opportunities to gather information and comments from the public while the department works to establish a sustainable electronic waste recycling program for Montana. The DEQ joined the EPA Plug-In to eCycling Program to maximize partnerships available for these pilot projects. Plug-In To eCycling is a consumer electronics campaign working to increase the number of electronic devices collected and safely recycled in the United States. Plug-In To eCycling focuses on three major areas:

- Providing the public with information about electronics recycling and increasing opportunities to safely recycle old electronics.
- Facilitating partnerships with communities, electronics manufacturers, and retailers to promote shared responsibility for safe electronics recycling.
- Establishing pilot projects to test innovative approaches to safe electronics recycling.

Partnership with the EPA Plug-In program has facilitated discussions with national retailers and electronics manufacturers regarding their involvement in Montana's pilot projects. Butte was the first Montana event to be sponsored by StaplesTM Retail Stores, and the first event to be held in a retail location. Staples sponsorship resulted in an event unlike the previous events in Montana. Through partnerships and sponsorships such as this, the Department of Environmental Quality continues to explore models for an electronics recycling program.

II. Summary

Event Partners

The following businesses and organizations partnered with DEQ to conduct this pilot project as a public-private partnership.

- StaplesTM Retail Stores
- National Center for Appropriate Technology, Butte
- Tatooine Electronic Systems, Inc., Billings
- Butte Central Catholic Schools
- Silver Bow County School District #1.

Event Supporters

KBOW Radio

Collection Event Focus Area

The event was advertised and available to anyone in Butte, or beyond. There was no limit placed on participation.

Hauler/Recycler

Tatooine Electronic Systems, Inc. an electronics recycling firm headquartered in Cheyenne, Wyoming. Tatooine opened a satellite warehouse in Billings in Spring, 2006 to collect electronics prior to sending to Cheyenne for processing. Brandon Fox manages the Billings location and is developing his market in Billings by working with schools, businesses and communities in eastern Montana and northern Wyoming. This is the first time the Department of Environmental Quality has worked with Tatooine on a collection event.

Staples requested information from Tatooine regarding their recycling operations and verified that Tatooine's operating procedures and policies met their expectations of environmental responsibility. DEQ staff had completed a visit and an audit of Tatooine's operations in 2005 and are satisfied that Tatooine does not export overseas and handles electronics responsibly. Staples and Tatooine formed a private partnership to handle the electronics collected. DEQ assisted with outreach and education, forming the partnership between Staples and the National Center for Appropriate Technology (NCAT), and gathered information for the Montana Rural Electronics Waste Recycling Project.

Advertising and Outreach

The following venues for advertising and outreach were used:

- a. Advertisements purchased in The Montana Standard, Butte
- b. Press releases sent to all area local newspapers: The Montana Standard, Butte
- c. Short "news brief" on the event in the Thursday, August 24 edition of The Montana Standard.
- d. 30-second radio advertisements purchased on: KBOW.
- e. KBOW conducted a live broadcast from the Staples event from 9 am to 11 am.
- f. Staples printed promotional bag stuffers which cashiers placed into customer bags for the two weeks prior to the event.
- g. Staples printed large promotional posters that were displayed around the store and in windows.
- h. Staples printed a large promotional banner that was placed on the outside of the building in the weeks before the event.
- i. NCAT sent letters to area businesses inviting them to participate and support local schools while clearing out inventories of old computers.
- j. The event was included as part of NCAT's 30th Anniversary Week Celebration. NCAT held a Sustainability Fest at their headquarters from Noon to 8 pm that day. Hundreds of people participated in the Sustainability Fest and were reminded of the electronics recycling event occurring just two miles away.
- k. The event was promoted on the NCAT and DEQ websites.
- 1. KTVM TV6, the NBC Butte affiliate conducted interviews during the event which aired on the 6:00 pm news.

Volunteer Recruitment and In-kind Donations/Contributions

StaplesTM Retail Stores sponsored this pilot project and raised funds for area schools, provided an incentive for people to participate, and paid the recycling bill for the collected electronics. Staples requested a \$10 donation for each electronic brought in for recycling. Staples requested the donation for Butte Central Catholic Schools and Silver Bow County School District #1. At the end of the event, participants had raised \$2,080 for each school. Staples presented the checks to the schools on November 2, 2006.

Staples provided \$10 coupons as an incentive for participating. In return for the \$10 donation, the participants received a coupon for \$10 off of a \$40 purchase at Staples. The donation was collected for each item recycled and participants were given a coupon for each donation. The coupon provides a good incentive to participate because the public may feel they are being rewarded for recycling, while feeling

good about donating to a worthy cause. The donation request also serves as a reminder that recycling is an activity with costs.

For the purposes of this event, Staples determined that a computer, monitor, keyboard, mouse, and cables would be accepted as one unit. Other equipment, such as a printer, a scanner, a fax machine, or DVD/VCR were accepted as distinct and separate units. Staples always accepts small items such as PDAs, cell phones, and rechargeable batteries for free recycling. Ink and toner cartridges can also be recycled daily at Staples, and customers receive a \$3 coupon upon dropping them off.

NCAT staff Jody Krzan and MaryAnne Skuletich organized the first meeting between all of the partners listed above. In addition, DEQ had requested that the Butte-Silver Bow County Health and Public Works Departments attend the meeting so that local community officials were aware of the event. Staples corporate office participated by conference phone, while Todd Gasser, the General Manager of the Butte Staples store attended the meeting. This meeting resulted in agreements that each school would recruit volunteers from athletic teams to assist with the event. All agreed that this was appropriate given that the schools were benefiting and the public would enjoy seeing the students participate in the fundraiser. Staples was surprised to learn that volunteers would be available to assist at the store during the event; normally Staples collection events just rely on store staff.

The partnership with NCAT proved to be important for the increased participation and total amount collected. NCAT provided excellent outreach and education regarding the event throughout the Butte-Silver Bow community. Letters sent to businesses resulted in 19,974 pounds collected from businesses in Butte. Staples, NCAT, and Tatooine agreed that participating businesses could donate up to \$100 (10 items) to local schools. The recycling costs for those 10 items would be donated by Staples. Businesses recycling more than 10 items, would pay Tatooine directly.

Staples Corporate Office provided press releases and outreach to media outlets regarding the event. NCAT and Staples promoted the event together and cooperated on media outreach. There was a short "news brief" regarding the event in the August 24th edition of The Montana Standard. NCAT arranged for KBOW radio station to conduct a live broadcast for a couple hours from the Staples store during the event. KTVM TV6, the NBC Butte affiliate, came to the event and interviewed Todd Gasser, General Manager, Staples, and Sandra Boggs, Department of Environmental Quality. The interviews were aired at 6:00 pm and may have prompted more people to participate in the event before Staples closed at 8:00 pm.

The week of the event

The letters sent to businesses invited their participation and requested businesses to call NCAT and set up appointments for Tatooine to pick up at their location. Butte businesses responded with over 19,000 pounds of electronics picked up for recycling.

Thursday Event (8 am to 8 pm)

Over the twelve-hour period on Thursday, twenty volunteers put in 58 hours of work beside staff from Tatooine (3), DEQ (1), and store employees. Each school provided student volunteers that worked in teams of four for two hours at a time. Each school was responsible for alternating shifts. The value of the volunteer hours was calculated at \$12 per hour for a total of \$696.

DEQ printed thank you cards which were handed to each participant as they left the event. The cards thanked participants for keeping hazardous waste out of the landfill and for making the effort to recycle. It also directed participants to DEQ recycling websites and encouraged viewing the film, An Inconvenient Truth, to learn more about individual efforts to affect global change. A copy of the note is included as part of the Appendix.

DEQ provided E-rase Your E-waste signs to post near the street and direct traffic into the parking lot. Students, volunteers, and Tatooine staff met participants in the parking lot with shopping carts and helped bring their used equipment into the store. Participants appreciated the volunteer help, and repeatedly thanked organizers and Staples for having the event. Participants were excited to have an opportunity to recycle and appreciated Staples sponsorship.

III. Event Evaluation and Results

The one day retail collection event collected over 400 items and resulted in 19,381 pounds of electronics recycled. Combined with the 19,974 pounds collected from businesses, this pilot project resulted in 39,355 pounds or 19.68 tons of electronics diverted from the landfill. Staples incentives and promotional support, combined with the outreach and promotional work performed by NCAT resulted in a very successful event that was well supported by the community.

The event was well attended and participants were enthusiastic about the opportunity to recycle electronics. Occasionally the front of the store became congested as people proceeded through cashier lines to pay the donation and receive coupons, while others stood nearby completing DEQ survey questions. Generally the atmosphere at the store was fun, and nearly all participants stated a need for future events.

Evaluation

This event was the most successful pilot project to date. All partners were pleased with the outcome and immediately began talking about holding more events. In the week leading up to the retail event, Tatooine picked up 10 Tons of electronics from Montana Tech College of Technology, Butte-Silver Bow County Government, NCAT, Butte Central Schools, and St. James Hospital. Twenty-four small businesses dropped off electronics at the one-day retail event.

Participants were asked to complete a survey and those results are tabulated in Appendix A. One hundred and fourteen people completed surveys. The survey revealed that a majority of participants learned of the event through newspaper and radio advertisements and the live radio broadcast. Most participants lived less than five miles away from the event, and the vast majority of participants were from residences. A large majority of participants were willing to pay up to \$10 to recycle used electronics equipment. Nearly equal numbers of participants would like to recycle used electronics at retail stores or municipal recycling centers.

Despite best efforts by all parties to advertise the requested donation amount, some participants still were unaware of the need to donate. A short news brief on the event appeared in the Thursday, August 24 edition of The Montana Standard and gave the impression that multiple items could be recycled for one \$10 donation. This misled the public and caused some participants to become upset when faced with donations up to \$60 to recycle 6 units. Despite this confusion, once the process was explained, most complied with the requested donation. Some people did refuse to pay, or paid only one donation for multiple items; the items were accepted anyway.

Staples issued 416 coupons that day and collected 9.7 Tons of electronics. Over 800 items were collected. A break down of units received by equipment type and manufacturer are available from the DEQ (call 1-800-433-8773).

The following tables list the types of equipment received and a partial list of the original equipment manufacturers represented in the collection.

Table 1. Volume and Type of Equipment Received

Equipment	Units (ea.)	Equipment	Units (ea.)
Monitor	538	Data Switch	13
PC	450	TV, Laptop Computer	12
Dot Matrix Printer	76	Server Component Hub	11
Inkjet Printer	75	Card Reader, VCR, Ext. CD ROM Drive	9
External Modem	34	Ethernet Repeater	8
Laser Printer	33	Keyboard, Scan/Copy/Print Combo	6
Desk Phone	22	Laptop Docking Station	5
Server	17	Pulled Hard Drives & Power Supplies; External Tape Drive; Printer Server; Typewriter; Video Camera	4
Scanner	15	DVD Player; Laptop Docking Port; Plotter; Scan/Copy/Fax Combo; Surge Protector; Video Camera Case; Backup Power Supply	3
Fax Machine	14	Copier; Desktop Copier; Ethernet Bridge; Ethernet Hub; External Hard Drive; Glare Reducers; LAN Bridge; PC/Monitor Combo; Pulled Floppy Drive; Seismograph; Speakers; Wireless Bridge; Electronic View Finder	2

Table 2. Equipment Received by Manufacturer

Percent Rec'd	Number Rec'd	Manufacturer*
12%	134	Dell
9%	100	HP
9%	98	Generic
7%	82	Gateway
6%	65	Compaq
5%	58	IBM
4%	51	Micron
4%	46	Digital
4%	40	CompuAdd
3%	38	Kuo Feng
3%	33	GLI
3%	31	KDS
3%	29	Epson
3%	29	Apple
2%	25	Argonaut
2%	21	NEC
2%	18	ITT
1% or less	7~17	AST; AT&T Brother; Canon; CTX; Future Power; Inmac; Kronos; Lexmark; Magnavox; Merit; Microcom; OkiData; Packard Bell; Panasonic; Princeton; Sony; Star; Tandy; ViewSonic; Zenith; Zeos

IV. Budget and Expenses

Due to the public-private partnership strategy used in this event, a budget for this event was never developed. Sponsors were asked to track expenses so that a total cost could be calculated for the event. Sponsors provided in-kind donations of equipment, materials, advertisements, labor and more. NCAT provided cash to cover advertising and DEQ provided necessary signs.

Staples bore all costs for recycling the equipment. The event was structured around the \$10 donation to schools and the incentive coupon from Staples. The donation request brought extra media attention and additional volunteers, while acquainting participants with the costs of recycling. Tatooine provided three employees that stacked and prepared the recyclables prior to loading on two 24-foot trucks.

V. Conclusion

On November 2, 2006, Sam Fletcher, District Manager, and Todd Gasser, General Manager of Staples presented Butte Central Catholic Schools and Silver Bow County School District #1 each a check for \$2,080 in donations. NCAT, the schools, and Staples were all pleased with the results and plan to repeat the event.

Sam Fletcher offered to initiate a new office paper recycling program within Montana stores. This new imitative would allow the public to drop off home office paper for recycling at any Staples store. This opportunity to expand recycling opportunities for Montanans by building upon this partnership with Staples is an example of the benefits achieved through public-private partnerships.

VI. Appendix

Appendix A

Montana E-rase Your E-waste Project Participant Survey Summary

Location: Butte, MT
Date: August 24, 2006

1. How did you hear about this event?

Web page	
TV ad	6
Newspaper ad	81
Flyer	5
Radio	28
Word of mouth	9
Other responses:	
Newspaper article	6
Store	2
School	1
Work tech.	1
Helped w/advertising	1
B.C. meeting	1
Email	1

2. How far did you travel today to recycle your electronics?

< 5 miles	72
5 – 10 miles	18
11 – 20 miles	2
> 20 miles	22

3. Are your electronics from a:

Residence	91
Business	24
Other	3

4. Who do you think should pay for the safe recycling of electronic products?

ing of electronic products:	
Consumer/user	67
Retail store	5
Electronics manufacturer	
Government	
Other responses:	
All of the above	4
Shared between user & manufacturer	
Company profiting from recycled	
components	
Rich oil companies	1
Undecided	

Total number of surveys taken: <u>114</u>

5. What is the most you would be willing to pay per item to recycle your electronics?

\$2	12
\$5	21
\$10	77
Other responses:	
\$20 for CPU, monitor, keyboard	1
& printer	

6. What is the most convenient way for you to recycle your electronics?

Take them to a municipal	
recycling center	60
Take them to a retail store	50
Mail them back to a manufacturer	2
Take them to a local charity	25
Other responses:	
Event like today	1

7. How many computer monitors and TVs do you have at home right now?

0-2	60
3 – 4	31
5 or more	23

8. How many households does your vehicle represent?

1	96
2	15
3	1
More than three	2